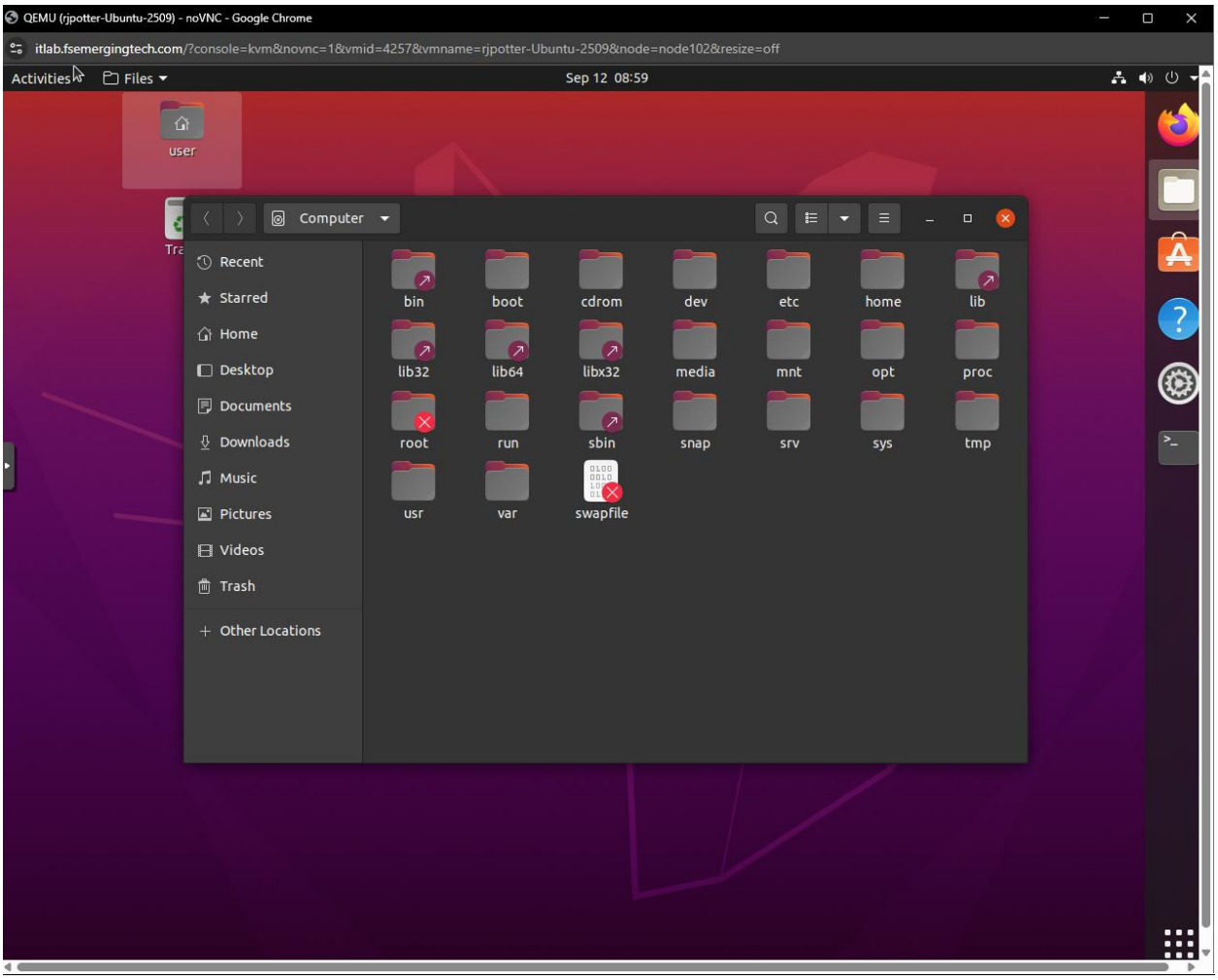
1. **Explain in writing the type of kernel and multitasking used in Linux**

Linux uses a Monolithic kernel, which communicates with all the hardware and software while controlling the system's resources. It relies on drivers to interact with hardware and uses other applications to complete tasks for the user. Linux is a preemptive multitasking operating system, meaning it can manage and execute multiple processes and threads concurrently. It achieves multitasking through a technique called time-slicing, where the kernel's scheduler rapidly switches the CPU's attention, allocating small timeslots to each process. This is done in a round-robin manner, ensuring every process gets a turn before any task receives a second turn. On multi-core systems, Linux can run multiple threads simultaneously to increase performance.

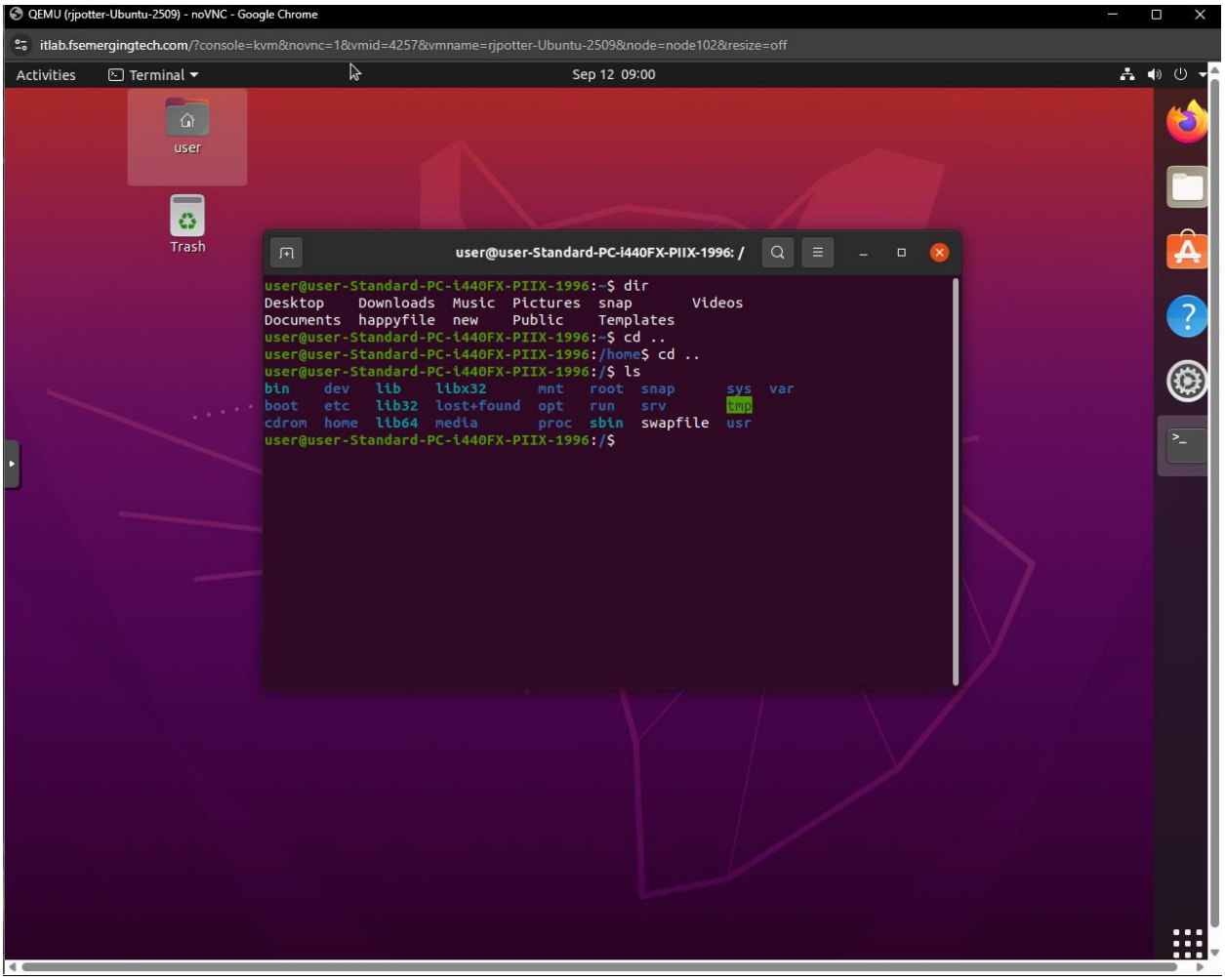
2. **Explain in writing the differences and similarities between the GUI and the CLI**

The main differences between the CLI and the GUI are that the CLI is text-based, while the GUI is graphical. This makes the GUI much more beginner-friendly, whereas the CLI requires more practice to become proficient. Some of the similarities are that both allow the user to issue commands to the computer and both provide access to the operating system's core functions, such as file management, running programs, and configuring system settings.

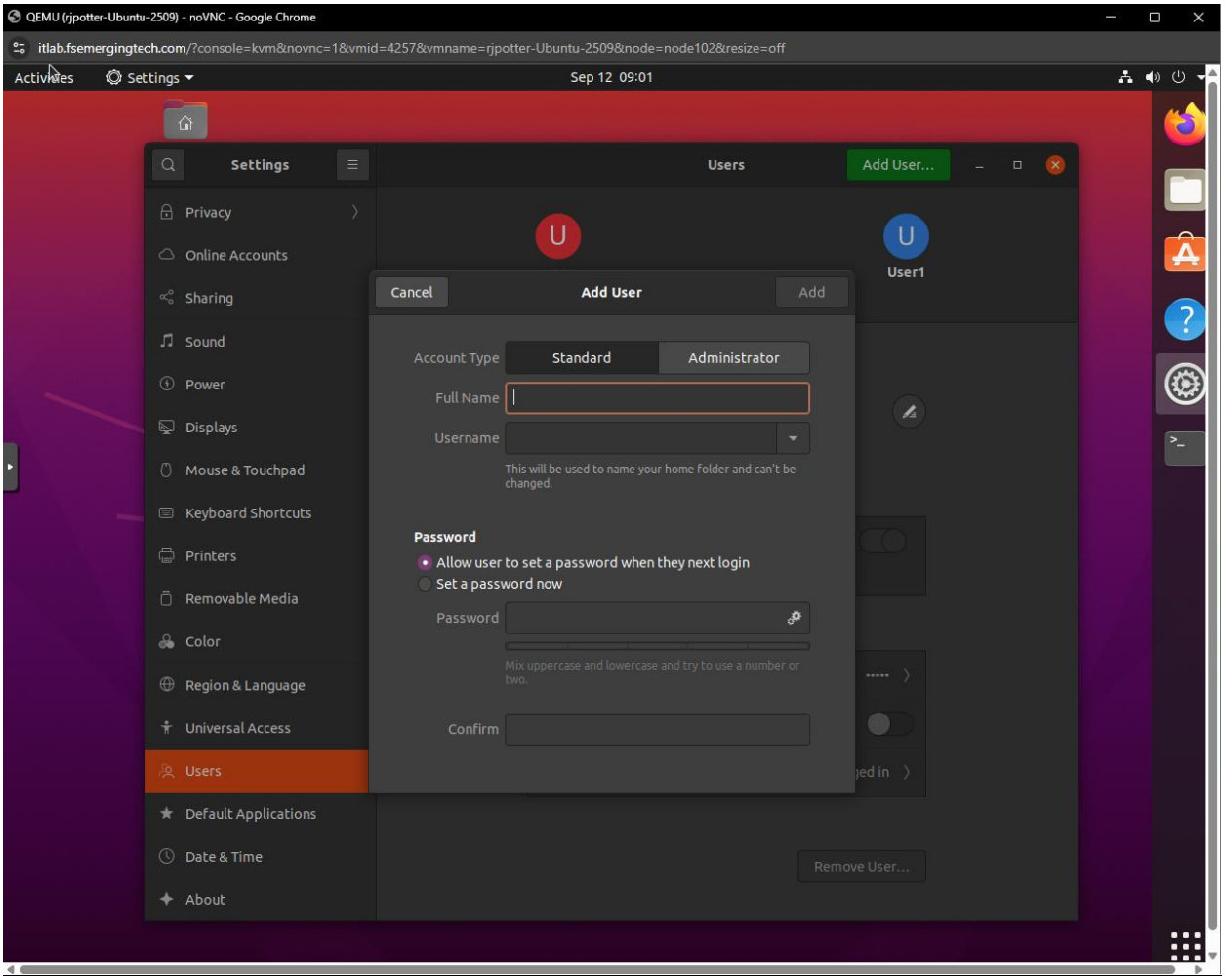
3. **Screenshot navigating the file structure in the GUI in Ubuntu**



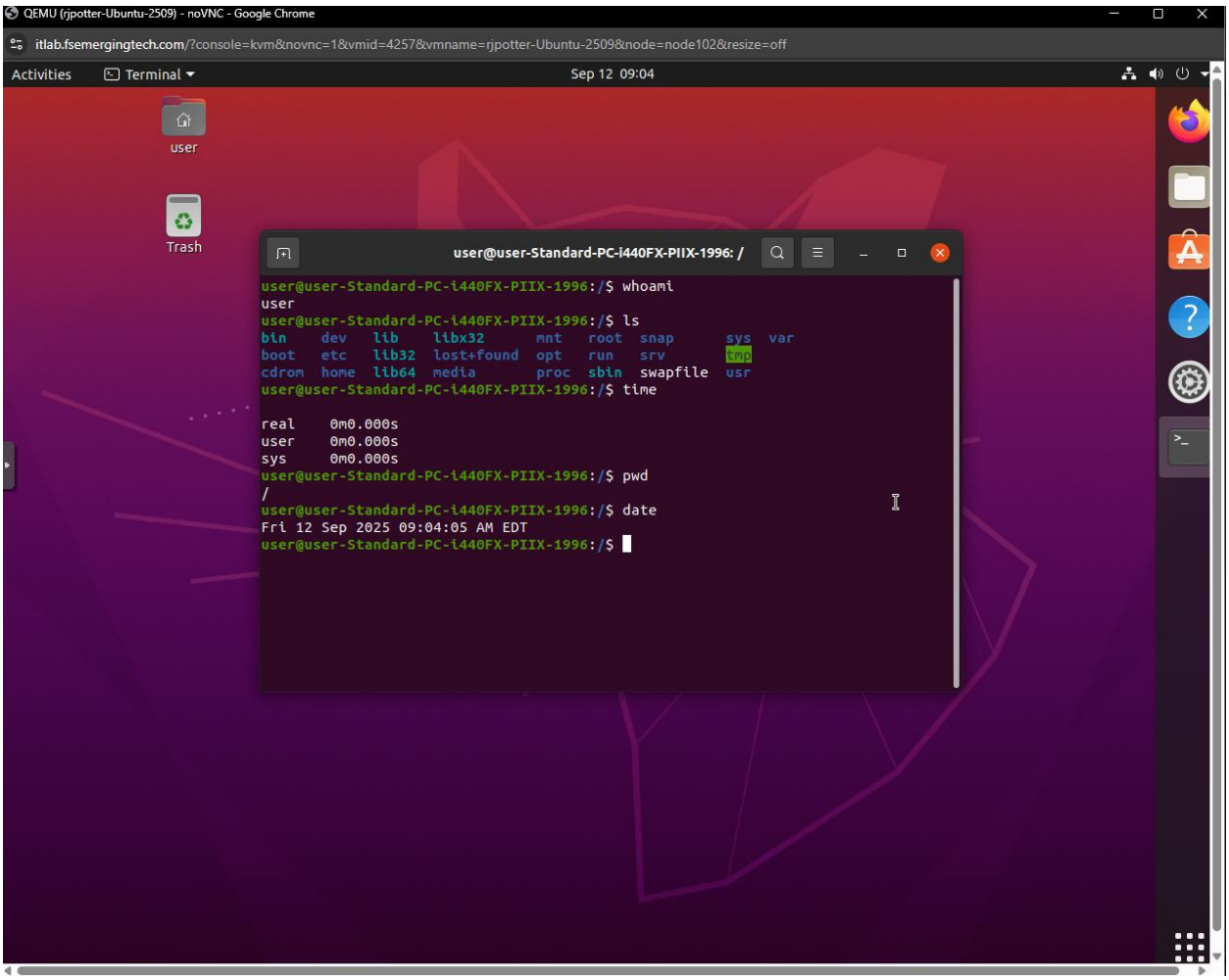
4. **Screenshot navigating the file structure in the CLI in Ubuntu**



5. **Screenshot how to create a standard user account in Ubuntu**

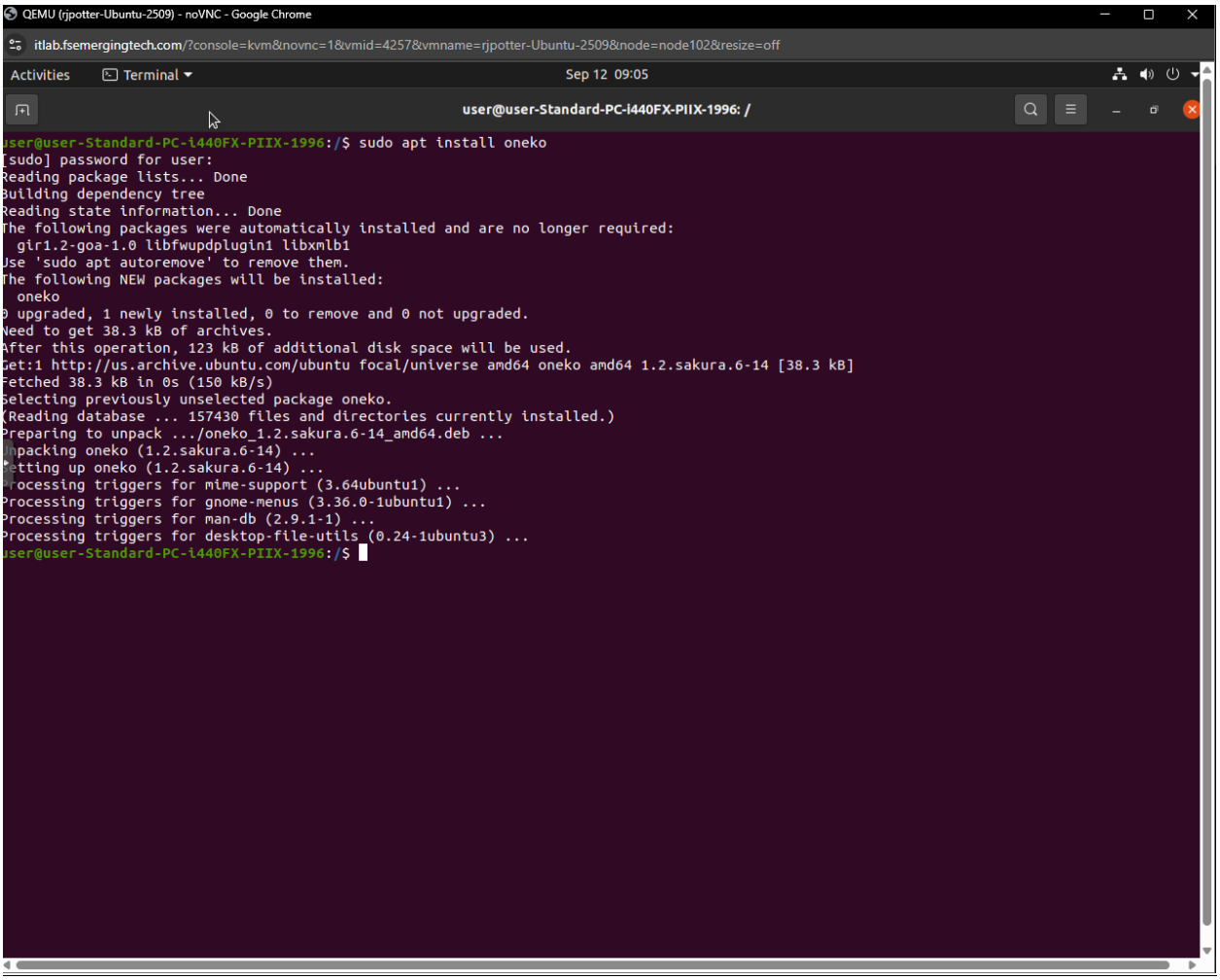


6. **Screenshot using 5 different commands in Ubuntu**



7. **Screenshot how to use the *sudo* command in Ubuntu (Example where we need to use**

sudo)


QEMU (rjpotter-Ubuntu-2509) - noVNC - Google Chrome
itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=4257&vmname=rjpotter-Ubuntu-2509&node=node102&resize=off
Activities
Terminal
Sep 12 09:05
user@user-Standard-PC-i440FX-PIIX-1996: /
user@user-Standard-PC-i440FX-PIIX-1996:/$ sudo apt install oneko
[sudo] password for user:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
gir1.2-goa-1.0 libfwupdplugin1 libxmlb1
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
oneko
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 38.3 kB of archives.
After this operation, 123 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 oneko amd64 1.2.sakura.6-14 [38.3 kB]
Fetched 38.3 kB in 0s (150 kB/s)
Selecting previously unselected package oneko.
(Reading database ... 157430 files and directories currently installed.)
Preparing to unpack .../oneko_1.2.sakura.6-14_amd64.deb ...
Unpacking oneko (1.2.sakura.6-14) ...
Setting up oneko (1.2.sakura.6-14) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
user@user-Standard-PC-i440FX-PIIX-1996:/$

8. **Screenshot how to install an application in Ubuntu (In the GUI or CLI)**